

Title		
Size	Number	Revision
A4		
Date: 05/11/2025	Sheet of	
File: D:\Lavori\..Chopper_Power_Board_01.SchDoc		Drawn By:

1

2

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1

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A

A

B

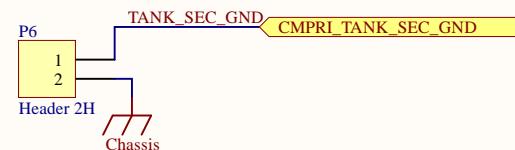
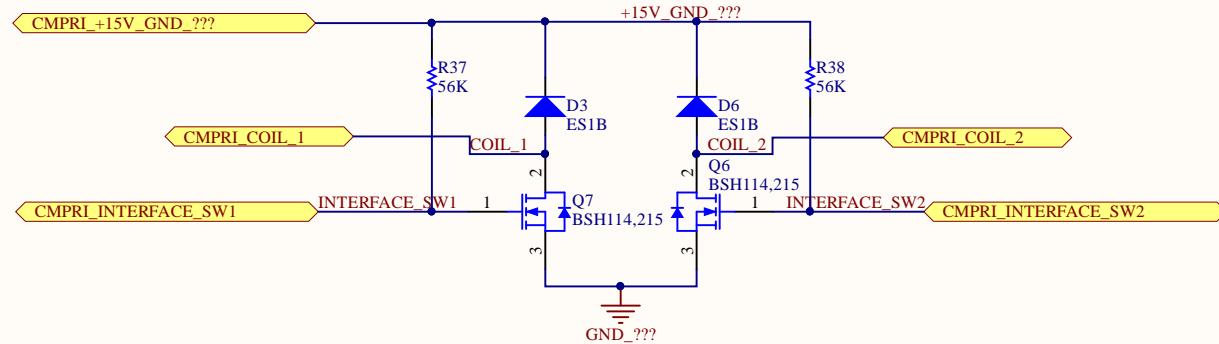
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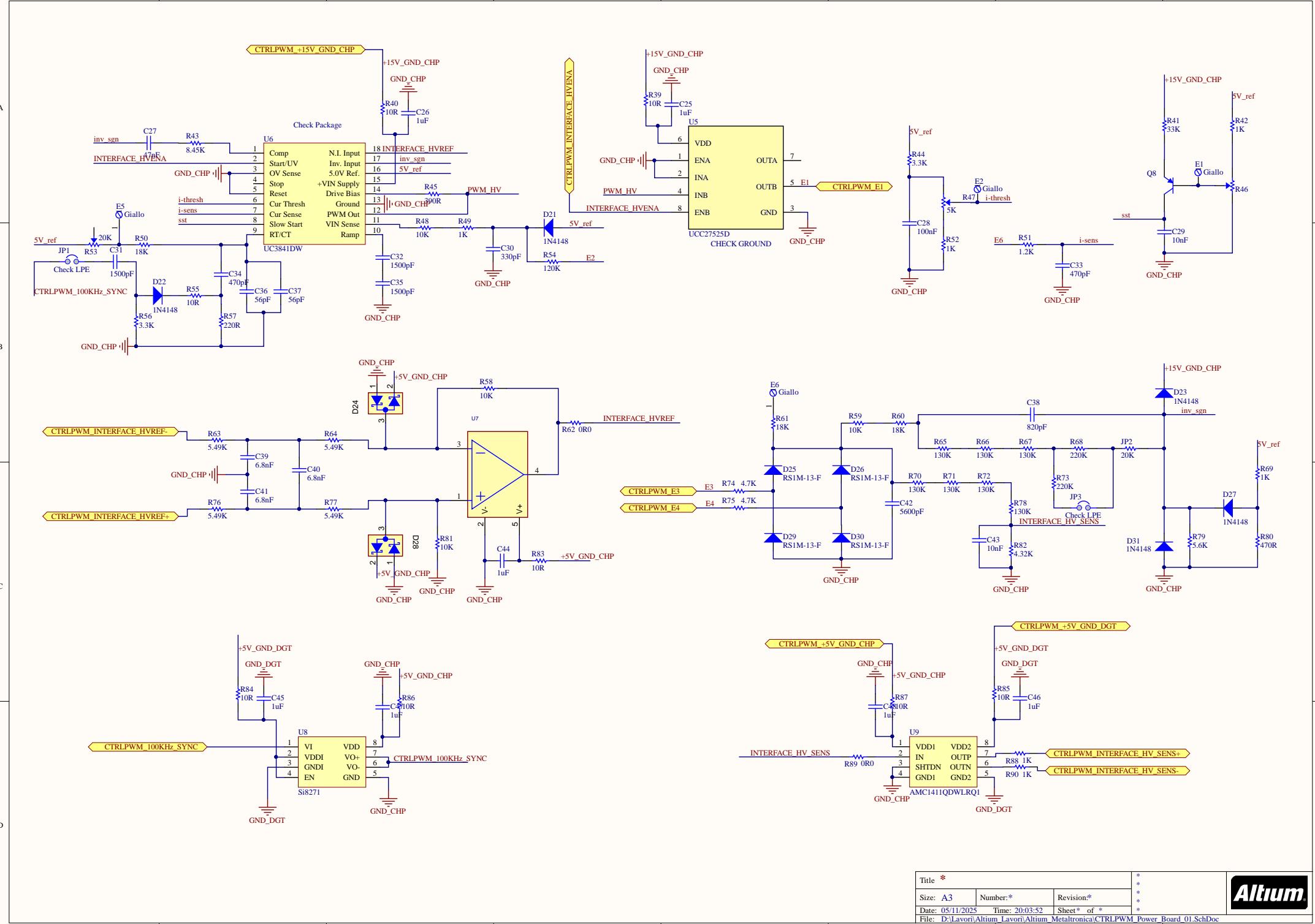
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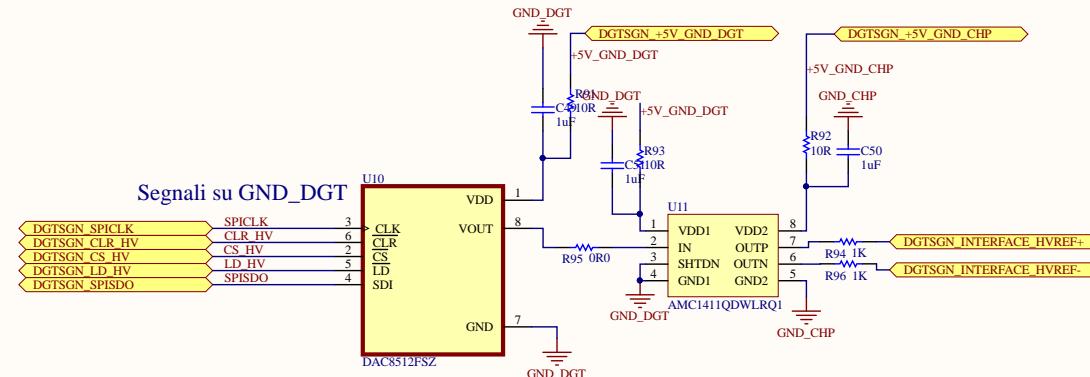


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Date: 05/11/2025	Time: 20:03:52	Sheet* of *	*
File: D:\Lavori\Altium_Lavori\Altium_Metaltronica\CMSPI_Power_Board_01.SchDoc			Altium®



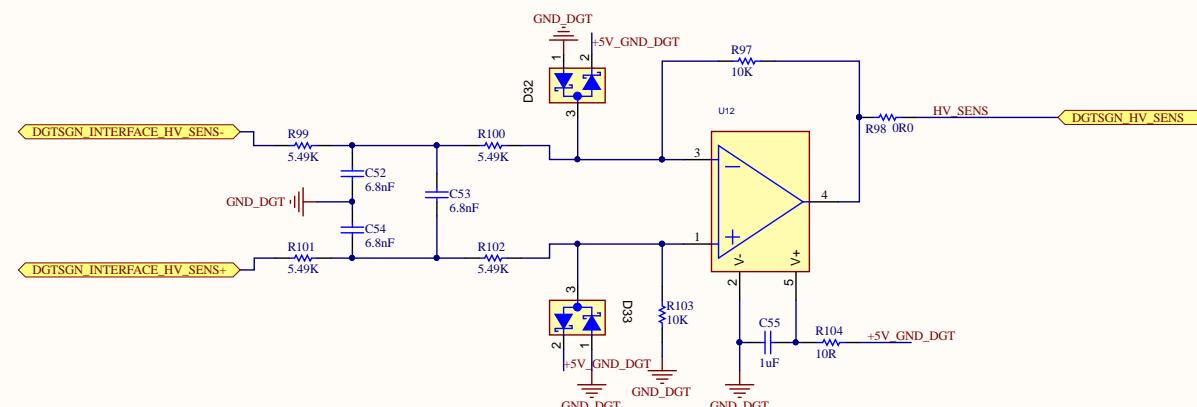
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Date: 05/11/2025	Time: 20:03:52	Sheet * of *	*
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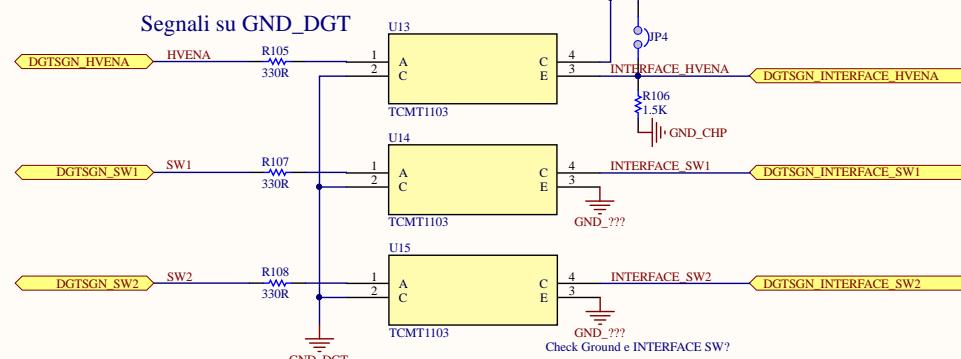
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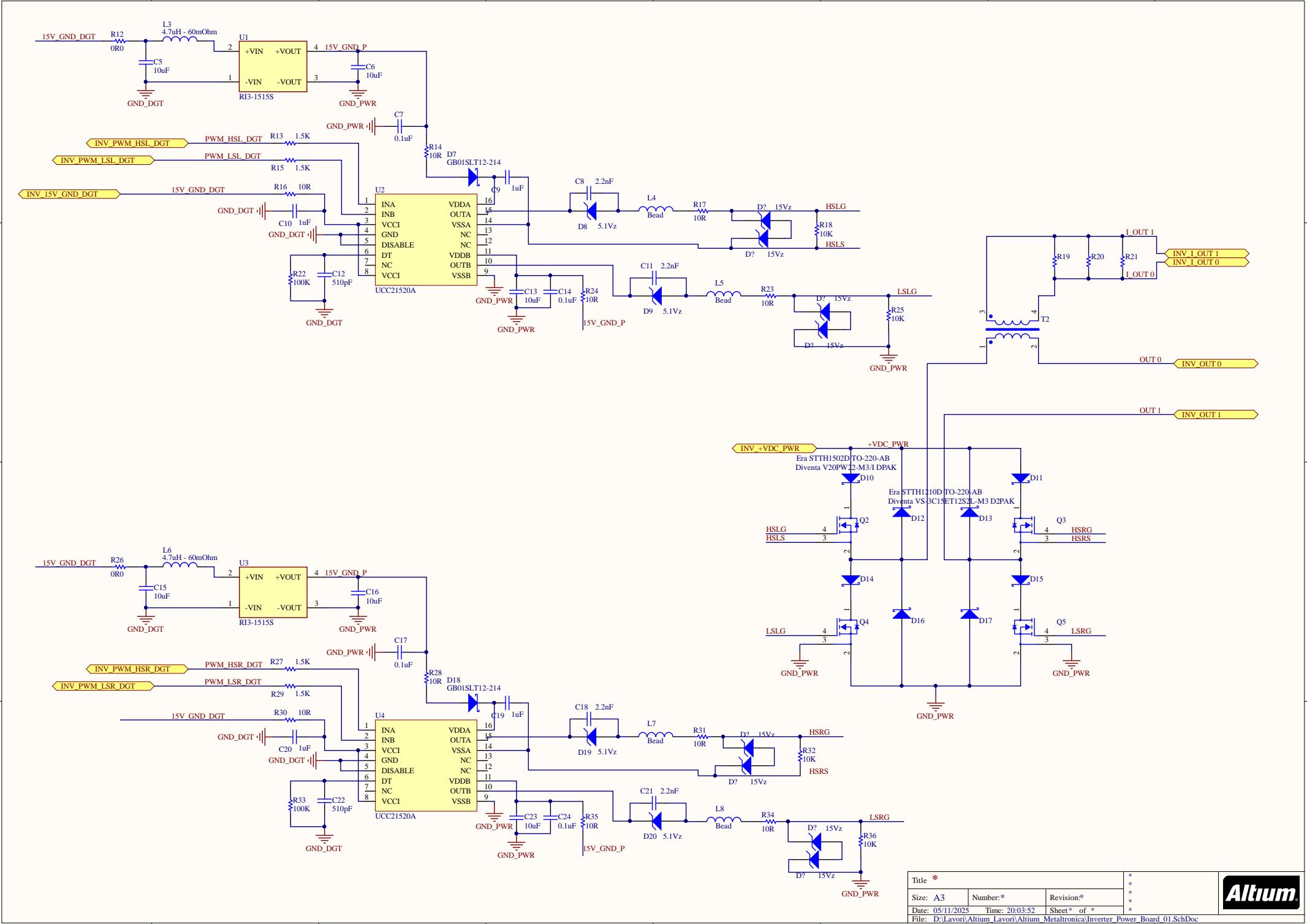
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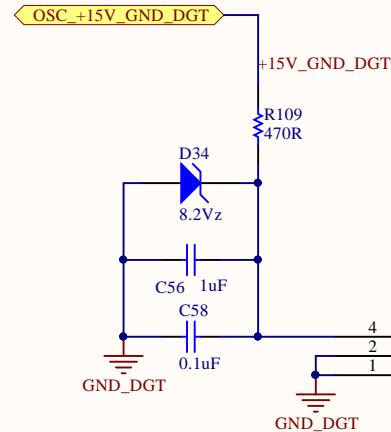


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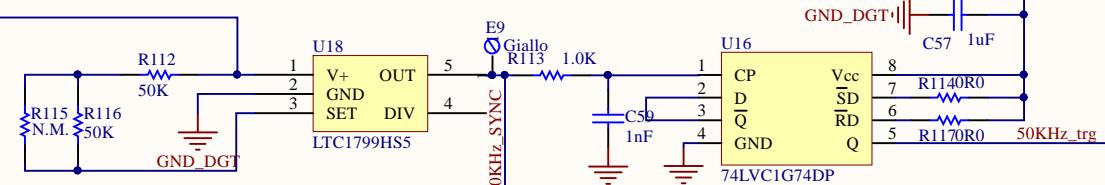
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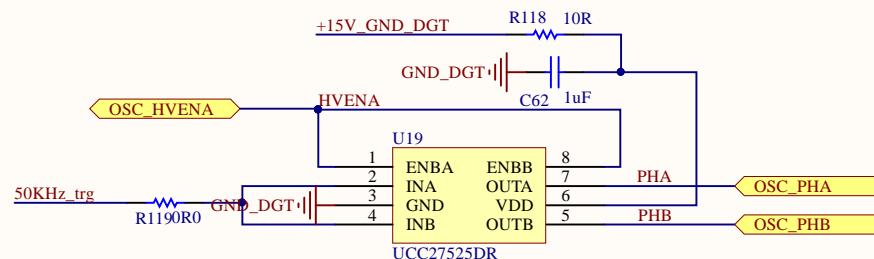
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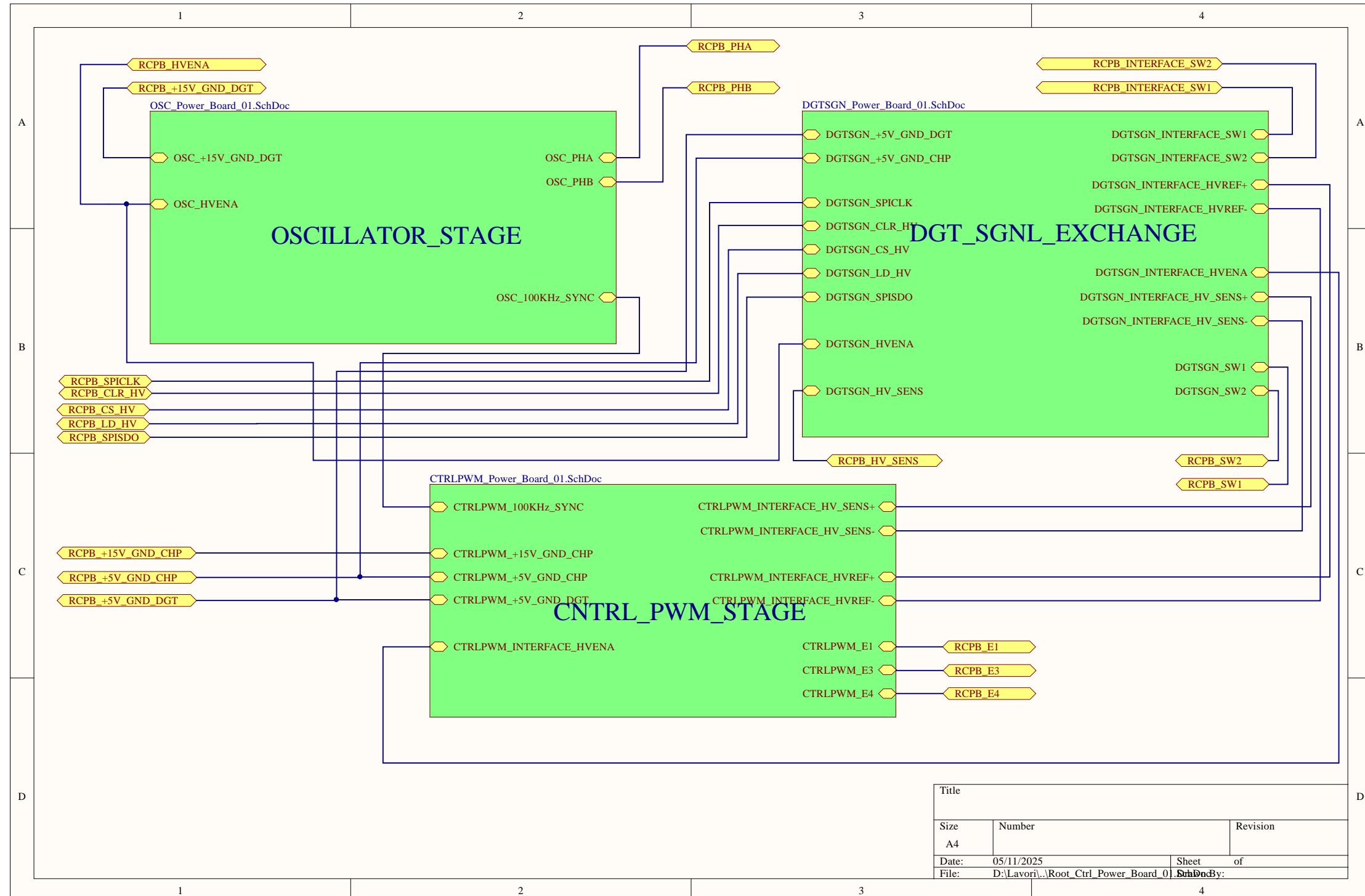


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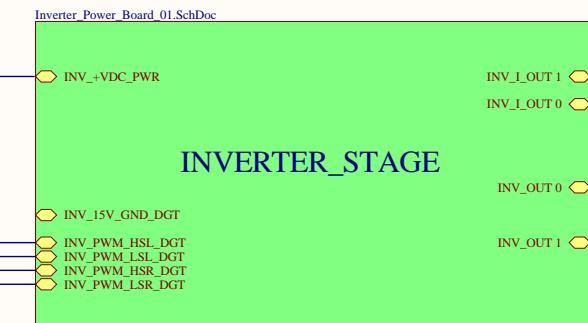
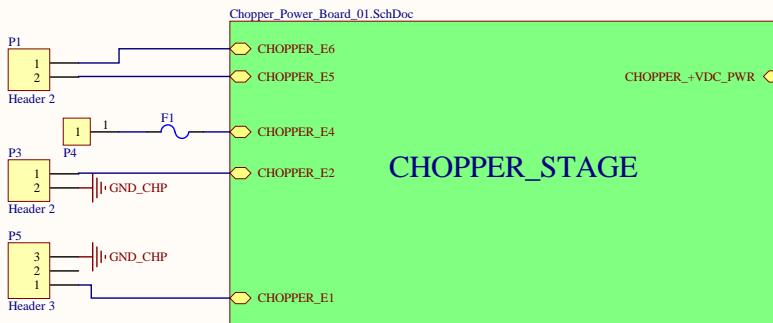
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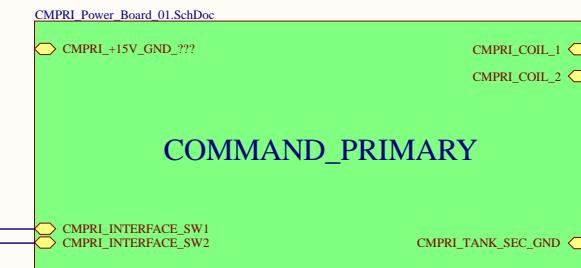
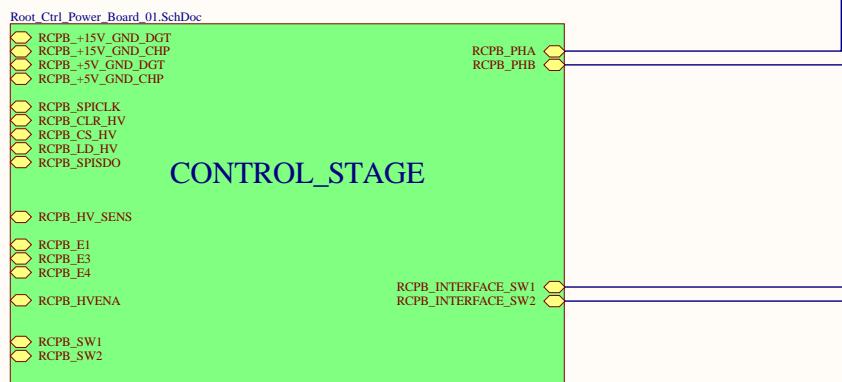
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Comment	Description	Designator	Footprint	LibRef	Quantity
	C1, C2, C3	C49_160V_022,115..31 5.507V_SMD_VDY	CAP_1		3
	C4	CAP_B2913- P22V5,W10V5,_EPCOS	CAP_1		1
	C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27, C28, C29, C30, C31, C32, C33, C34, C35, C36, C37, C39, C40, C41, C42, C44, C45, C46, C47, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C59, C60,				
CAP_1	GENERIC CAPACITOR	C61, C62	CAPC012X14N	CAP_1	56
CAP_1	GENERIC CAPACITOR	C38	CAPC325X05N	CAP_1	1
CAP_1	GENERIC CAPACITOR	C42	CAPC450X42N	CAP_1	1
G801SLT12-214	1.2V FA-SMD	D1, D7, D18	DIODA234V23N	DIODO_SCHOTTKY	3
DSEF130-12A	DIODE ARRAY GP 1200V 30A TO247AD	D2	TO-247,DECK	DIODO_SCHOTTKY_BAT545_SOT-23	1
E51B	DIODO GENERICO	D3..D6	DIODA326V24N	DIODO	2
	DIODE ARRAY GP 1200V 30A TO247AD	D4	TO-247,DECK	SCHOTTKY_DUAL_CATH-D-PAK	1
S1V2	Zener Diode	D5..D8,D9,D19,D20	DIODA2512X11N	D_Zener	5
	DIODE SCHOTTKY 200V 20A SLIMDPAK, DIODE SIL CARBIDE 1.2KV 1A SMD	D10, D11, D14, D15	TO238P973X240-3N	DIODO_SCHOTTKY	4
V20PW22-M3/N	DIODE SIL CARB 1200V 15A TO263AB	D12, D13, D16, D17	TO254P152X483-3	DIODO_SCHOTTKY	4
VS-3C15ET125ZL-M3		D21, D22, D23, D27,	SOD1160X60-2N	DIODO	5
IN4148	DIODO GENERICO	D31			
	Diode Schottky SOT23 3.70V, 0.07A	D24, D28, D32, D33	SOT95P251X112-3N	BAS70-04-7-F	4
RS1M-13-F	DIODO GENERICO	D25, D26, D29, D30	DIODO..DO-214BA	DIODO	4
8.2Vz	Zener Diode	D34	DIOMEL3515N	D_Zener	1
15Vz	Zener Diode	D?	DIOMEL5025N	D_Zener	8
Giallo	GENERIC TURRET	E1, E2, E5, E6, E9	FORO_IWO	TORRETTA_2	5
SINGLE TURRET	GENERIC TURRET	E3, E3/M, E4, E7, E8	TURRET_1532- .KEYSTONE	TORRETTA_2	5
FUSE	GENERIC FUSE	F1	ET40_FUSE	FUSE	1
JUMPER_2_1	Generic Jumper Closed	JP1,JP3,JP4	SPAD_1x2	JUMPER_2_1	3
		R2, R10, R11, R12, R13, R14, R15, R16, R17, R18, R22, R23, R27, R28, R30, R31, R32, R33, R34, R35, R37, R37, R38, R39, R40, R41, R42, R43, R44, R45, R48, R49, R50, R51, R52, R54, R55, R56, R57, R58, R59, R60, R62, R63, R64, R66, R74, R75, R76, R77, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88, R89, R89, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100, R101, R102, R103, R104, R105, R106, R107, R108, R109, R110, R111, R112, R113, R114, R116, R117, R118			
RES_1	GENERIC RESISTOR	R119	RES201200N	RES_1	94
	INDUCTOR MURATA 1000 SERIES	I1	IND_MURATA_3300- SERIES	INDUCTOR_3	1
INDUCTOR_3	GENERIC COMMON MODE INDUCTOR	I2	IND_MURATA_LCCJ-50- SERIES	INDUCTOR_4	1
INDUCTOR_4	GENERIC INDUCTOR	I3..I6	INDM552X20N	INDUCTOR_1	2
4.7uH-40mH	Ferrite Bead 0805	I4, I5, I7, L7	RES201200N	INDUCTOR_1	4
Bead	Header, 2-Pin	P1, P2, P3	HDR1X2	Header_2	3
Header_2	Single Pad	P4	ET40_FUSE_PAD_11.3x 7.1mm	Component_1	1
Header_3	Header, 3-Pin	P5	HDR1X3	Header_3	1
Header_4H	Header, 2-Pin, Right Angle	P6	HDR1X2H	Header_2H	1
UH4C12005387S		Q1, Q2, Q3, Q4, Q5	TO127P1435X457-8N	Component_1	5
B9H114_21S		Q6, Q7	SOT95P237X112-3N	N_FET	2
	GENERIC TRANSISTOR PNP SOT23	Q8	SOT95P251X112-3N	PNP_SOT23	1
		R1	RES23216X00N	RES_1	1
		R2, R3, R4, R19, R20, R21	RES201200N	RES_1	6
		R5, R6	RES243220N	RES_1	2
		R7	RES32250N	RES_1	1
		R8, R9	TO220-3PN, SMD, DECO	RES_1	2
POTENTIOMETER	GENERIC POTENTIOMETER	R44, R47, R53	POT_3294W	POTENTIOMETER	3
		R51, R52, R54, R57, R68, R70, R71, R72, R73, R78	RES23216X00N	RES_1	10
RES_1	GENERIC RESISTOR	R115	RES201200N	RES_1	1
RES_1	GENERIC RESISTOR	R116	RES201200N	RES_1	1
TRANSFORMER_BLOCK VB1/1 SERIES	TRANSFORMER_BLOCK VB1/1 SERIES	T1, T2	TRANSFORMER_BLOCK_VB2/B17 VB1/1-SERIES	TRANSFORMER_BLOCK_VB1/1-SERIES	2
R03-1515S		U1, U3	CONV_R10-1515S/H2	Component_1	2
UCC21520A		U2, U4	SOIC127P1030XQ265-16H	Component_1	2
	E-AIS-A, dual-channel gated driver with 5-V UVLO, enable, and inverting/non-inverting inputs & 50nC -40 to 140				
UCC27525D		U5	DO008A_N	UCC27525D	1
UIC3841DW		U6	SOIC127P1030XQ265-18P	Component_1	1
OPA376AIDCKT	Precision OpAmp v1 SC- 70-5 OPA376AIDCKT	U7, U12	SOT65P210X90-5N	OPA376AIDCKT	2
S8271		U8	SOIC127P600X175-8N	Component_1	1
AMC14110DWLR01		U9, U11	SOIC127P1720X403-8N	Component_1	2
	12BIT DAC, SOIC8, 8512 Resolution, Bits 12bit, Time, Settling 164µs, Sample Rate 400kS/s, 12 bit DACs, 1 Interface				
TCLMT1103	SOP-4 CPLD 100-200% CTR 10mA VDE =3	U13, U14, U15	SOP-4L_TC	TCLMT1103	3
74LV1G174DP		U16	TSGP6P240X110-8N	Component_1	1
L1179086-5		U17	SOT95P240X100-6N	Component_1	1
LTC1799H5		U18	SOT95P280X100-5N	Component_1	1
UCC27525DR		U19	SOIC127P600X265-8N	Component_1	1